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Schizophrenia: Then and Now

Christina Lee

The term “schizophrenia”, which roughly means “divided mind”, was introduced over 100 years ago by Paul Eugen Bleuler, a Swiss psychiatrist. He coined the term after observing that many patients suffering from this mental disorder seemed to fluctuate between normal and abnormal states. Schizophrenia is a psychological disorder characterized by a loss of contact with reality as well as a disruption of thought, perception, mood, and movement. Although schizophrenia becomes apparent fairly early on in life during adolescence or early adulthood, it usually persists for life. Schizophrenia is a major public health problem and 1% of the population is affected by the disorder [1]. The etiology of schizophrenia is not well understood and it is not known if there is a single pathological process that causes it [2] but it is important to study because the disorder affects “many of the characteristics that make us human: thought, perception, [and] self-awareness” [1]. There is still a lot of progress to be made in understanding schizophrenia. However, understanding its history can prove to be important in figuring out the etiology as well as effective treatment options.

For Paul Eugen Bleuler, the most important sign of schizophrenia in patients was the splitting of different psychological functions, resulting in a loss of unity of the personality [3]. Today, however, the symptoms of schizophrenia are better organized. There are two categories of symptoms: positive symptoms and negative symptoms. Positive symptoms are the presence of “abnormal thoughts and behaviors, such as: delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior.” Negative symptoms are the absence of responses that are normally present, such as “reduced expression of emotion, poverty of speech, difficulty in initiating goal-directed behavior, [and] memory impairment” [1].

The Ancient Greeks formed many postulations about mental disorders, including diseases recognizable as schizophrenia. They believed in a humoral theory that stated that “when internal or external factors disturb the balance of the blood, phlegm, yellow bile or black bile in the body, the imbalance lead[s] to insanity.” Bile and phlegm were seen as being very important factors for mental disorders. It was believed that people with brains affected by bile were noisy and hyperactive whereas those with brains affected by phlegm were very quiet. The Ancient Greeks also thought that the severity of mental illnesses was affected by the weather in terms of humidity and temperature. They believed that individuals were born with certain predispositions to illness, including mental illnesses, which is a highly regarded belief even today [4]. Today, we think of this in terms of genes [1] and the Ancient Greeks also realized the familial nature of some mental illnesses [4]. This is important because recent evidence suggests that schizophrenia runs in families as family and twin studies show that schizophrenia is primarily a genetic disorder [1].

An early case of schizophrenia was noted in the mid-eighteenth century before Bleuler had even introduced the official term. Franz Xaver Messerschmidt of Germany was born in 1736 and he was highly regarded as being a very great artist. However, he suffered a permanent decline in his career soon after signs of mental illness appeared. The Prime Minister wrote “that for three years [Messerschmidt showed] signs of some confusion” and that he had “a not perfectly healthy imagination” and “odd and peculiar

whims". Messerschmidt described to his colleague that he had nocturnal visits by demons and that he was tortured by them. Across the board, he was viewed by his contemporaries as being a confused man with a very lively and strange imagination. He was viewed as being deluded but he was not considered to be insane even when he lost his employment and social acceptance due to his behavior and thoughts [5]. Today, psychiatry is a much more pervasive field and mental illnesses are familiar to many, making it easier to spot when someone is suffering from a psychological disorder. Nowadays, as a society, we try to be more compassionate toward mental illnesses and recognize them as diseases of the body [1], rather than alienating and isolating those we do not understand.

Today, we have a better understanding of schizophrenia and mental disorders in general but there is still progress to be made [2]. The two leading hypotheses for the cause of schizophrenia are much more sophisticated than what the Ancient Greeks thought about mental disorders because neuroscience, psychiatry, and medicine have advanced greatly over time. The dopamine hypothesis suggests that "schizophrenia is caused by excessive activation of D₂ receptors in the mesocorticolimbic dopamine system in the brain" and the glutamate hypothesis suggests that "schizophrenia is caused by the reduced activation of NMDA receptors in the brain." The treatment consists of a combination of drug therapy as well as psychosocial support [1]. Although the Ancient Greeks postulated that certain illnesses were potentially passed down, they did not isolate environment as being an important factor [4]. Recently, twin studies have shown that 50% of the time, one twin is affected by schizophrenia while the other is not. This shows that genes aren't the only determinant factor in acquiring mental illnesses, but that environment also plays a large role [1].

Over the years, we have made many strides in understanding not only schizophrenia, but also all mental disorders as well as brain functioning in general. Mental disorders are now seen as the products of pathological modifications of the brain so treatments are focused on correcting these problems. Our society is becoming much more accepting of mental illnesses and they are not as stigmatized, but rather are viewed as actual diseases of the body [1]. Despite the progress made, however, we do have gaps in our knowledge. Although it's still possible to treat mental disorders without knowing the exact causes of them per se, knowing the causes will help us take preventative measures and will help improve treatment plans so it is important that we continue on our search to uncover more information and evidence regarding mental disorders.

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